

Industrial accidents in rubber products in Japan in 1999-2020

rubber products industry Code No.010806

Type of accidents in rubber products in 1999-2020

Type of accidents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
fall from height	22	22	27	22	31	21	27	24	18	33	11	13	16	18	19	11	18	15	10	13	20	17
falling to same level	36	34	30	37	38	43	38	32	37	40	22	15	36	33	28	34	24	30	36	37	25	35
crash	9	17	12	13	9	11	14	16	9	13	7	10	9	11	5	4	10	7	9	8	9	12
struck by flying or falling object	35	21	27	21	20	23	20	18	17	18	15	19	17	28	14	10	15	10	9	15	9	20
collapse	7	6	4	5	8	3	3	4	2	3	3	4	1	3	5	3	7	2	3	2	4	1
crashed by	10	9	6	12	10	5	11	9	14	14	7	8	6	7	11	6	7	12	5	10	9	9
caught in/between	187	231	175	171	181	179	161	169	150	153	93	109	107	121	98	89	85	75	80	88	111	86
cut	42	49	43	46	43	34	33	33	35	39	20	20	26	19	24	22	23	27	17	29	17	20
injury to the sole of the foot	0	0	1	1	0	-	1	0	3	0	1	0	1	0	0	0	0	0	0	1	0	0
drown	0	0	0	-	0	-	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
contact to high/low-temperature	6	10	12	8	7	9	11	10	11	8	2	11	5	10	8	6	12	4	6	11	7	8
contact to harmful substance	0	0	4	5	3	1	2	3	1	5	1	3	1	3	0	1	1	2	1	3	2	2
electric shock	0	0	2	-	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
explosion	1	0	0	-	0	-	0	0	0	6	0	1	0	0	0	1	0	0	0	1	0	0
burst	0	0	0	1	2	-	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
fire	0	2	0	-	1	-	0	0	2	1	0	1	0	0	0	2	0	0	0	0	0	1
traffic accident (public road)	6	2	0	4	7	2	6	8	2	1	4	2	2	1	3	1	2	0	4	3	2	0
traffic accident (others)	0	0	0	-	0	-	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
reaction to motion/improper motion	28	25	25	17	20	28	38	30	38	26	24	27	46	35	26	29	24	22	41	21	22	22
others	1	1	2	2	1	-	1	0	2	0	1	1	1	0	2	1	0	0	0	1	0	7

unclassifiable	0	0	2	-	1	-	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	
total	390	429	372	365	383	360	368	356	342	362	211	245	276	289	244	220	228	206	221	244	239	240

Causal agents (middle) of industrial accidents in rubber products in 1999-2020

Causal (M) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine	1	0	1	-	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	6	5	5	2	3	7	2	4	6	4	4	1	4	4	5	4	2	2	1	6	3	0
woodworking machine	1	1	0	-	2	-	0	2	0	3	3	1	0	0	0	1	3	1	0	0	1	0
construction machine	0	0	1	-	0	-	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0
metal manufacturing machine	36	43	33	26	33	25	29	22	18	13	3	14	19	14	13	13	11	15	11	17	11	25
general machine	159	193	144	143	151	162	139	141	141	138	90	91	90	110	92	78	78	65	75	81	87	66
mobile silviculture machine																	0	0	0	0	0	0
crane	7	3	5	3	7	5	5	3	6	4	1	2	6	1	2	1	4	0	4	2	0	5
conveying machine	24	32	15	33	33	29	24	27	22	28	15	19	12	17	12	6	15	13	7	12	23	15
vehicle	3	4	0	4	7	3	7	7	3	2	3	2	2	1	1	1	1	1	3	4	4	3
pressure vessel	1	2	2	1	3	2	3	2	2	7	1	1	1	2	1	0	4	2	0	0	1	0
chemical facilities	3	1	0	1	1	-	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0
welding equipment	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
kiln, caldron	1	1	2	1	1	1	0	0	1	3	1	1	0	0	1	5	0	0	1	0	0	0
electric equipment	0	0	2	-	1	1	0	0	0	1	0	0	0	1	0	1	0	0	2	0	0	4
human power machine, tools	26	28	25	29	18	15	18	23	15	26	11	21	23	13	15	12	13	25	17	18	13	19
tools	19	17	23	18	19	23	23	20	22	32	8	10	16	12	20	12	18	17	13	17	15	17
other equipments, facilities	6	7	9	14	6	4	12	5	6	14	10	8	6	9	2	8	10	7	8	9	3	11
temporary buildings,	39	32	39	38	35	39	47	34	34	36	25	19	35	39	31	29	31	35	26	33	31	31

establishments																						
hazards, harmful substances	1	5	5	5	6	3	2	3	7	4	0	3	1	2	2	4	2	3	1	3	2	3
materials	22	20	30	22	23	9	18	20	27	15	15	23	16	20	15	15	16	7	16	13	15	9
load	24	16	17	10	19	23	17	27	14	19	11	11	24	20	16	15	8	2	14	10	11	12
natural environment	2	1	3	2	2	2	4	2	1	2	1	5	2	7	2	5	3	0	3	9	5	3
other causal agent	0	9	1	2	4	-	1	4	0	1	0	2	0	2	2	2	2	0	2	1	3	5
no causal agent	7	9	8	9	8	6	16	10	17	7	8	11	17	14	10	8	7	10	15	7	10	11
unclassifiable	2	0	2	2	1	-	1	0	0	2	0	0	1	0	0	0	0	0	1	1	1	1
total	390	429	372	365	383	360	368	356	342	362	211	245	276	289	244	220	228	206	221	244	239	240

Causal agents (small) of industrial accidents in rubber products in 1999-2020

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
engine			1		0		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism			5		3		2	4	6	4	4	1	4	4	5	4	2	2	1	6	3	0
circular sawing machine			0		1		0	2	0	1	3	1	0	0	0	0	1	0	0	0	1	0
band sawing machine			0		1		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
wood planer machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hollow chisel mortiser, wood borer			0		0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
chamfering machine, router, woodworking milling machine			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chain saw			0		0		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
other woodworking machines			0		0		0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0
leveling, transporting or loading machine			1		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
excavating machine			0		0		0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0

equipment																					
arc welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
kiln, caldron			1	0	0	0	0	1	0	1	0	0	1	4	0	0	0	0	0	0	
industrial dryer			1	1	0	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	
other kiln, caldron			0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
transmission			1	1	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	
electric power facilities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
other electrical equipment			1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	
human power cranes			0	0	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0	1	
human power hauling equipment			10	10	6	7	5	15	4	8	12	8	7	6	8	12	9	5	6	9	
human power machine			2	0	0	0	1	0	0	0	0	1	1	2	2	0	0	1	1	1	
hand tool			13	8	11	15	7	11	7	12	11	4	7	4	3	13	8	12	6	8	
ladder			10	9	7	8	7	13	3	3	8	5	8	6	4	7	2	8	8	5	
slinging tool			2	0	0	1	0	1	1	2	2	0	0	1	1	3	2	2	0	0	
other tools			11	10	16	11	15	18	4	5	6	7	12	5	13	7	9	7	7	12	
other equipment, facilities			9	6	12	5	6	14	10	8	6	9	2	8	10	7	8	9	3	11	
scaffolding			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
timbering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
stairs, landing stage			10	10	14	9	6	8	5	3	8	7	3	5	7	7	5	7	6	7	
opening			0	1	0	0	0	1	1	0	1	2	0	0	0	2	1	0	2	0	
roof, beam, haze, crossbeam, principal rafter			1	1	0	1	1	1	1	0	0	0	2	0	1	0	0	0	1	0	
working platform, boot board			8	4	6	4	4	7	3	3	4	7	5	4	5	10	3	5	8	2	
passage			13	13	19	13	17	12	8	9	16	14	13	13	14	11	12	17	6	18	
building, establishment			1	5	4	6	3	5	5	2	4	4	3	5	1	4	3	4	4	3	

19 years old or less	18	18	4	15	8	10	8	7	13	13	7	8	4	5	9	6	5	3	1	6	4	5
20-29	80	84	90	68	83	77	75	84	79	70	42	50	54	48	47	39	42	31	38	38	40	37
30-39	56	89	63	74	69	93	88	74	83	78	45	61	72	70	56	55	53	50	38	55	55	42
40-49	82	82	72	76	76	60	75	67	61	71	36	43	58	63	52	51	54	46	53	56	68	69
50-59	123	120	100	103	104	90	90	87	70	81	53	52	60	54	46	38	41	47	54	49	43	50
60 years old or more	31	36	43	29	43	30	32	37	36	49	28	31	28	49	34	31	33	29	37	40	29	37
total	390	429	372	365	383	360	368	356	342	362	211	245	276	289	244	220	228	206	221	244	239	240

Workers' number of workplace of industrial accidents in rubber products in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	61	75	58	65	73	85	62	74	50	47	25	36	29	34	32	30	22	29	33	30	24	17
10-29	85	116	108	98	103	88	93	73	67	77	72	58	59	64	58	42	54	49	42	57	41	50
30-49	70	69	43	65	49	49	51	49	56	40	19	31	38	52	31	31	36	20	42	31	39	33
50-99	54	41	50	40	57	41	52	50	48	45	25	26	45	31	39	36	28	43	33	35	45	39
100-299	63	67	62	51	61	48	50	68	68	89	37	56	63	50	48	46	55	29	34	45	46	53
300 workers or more	57	61	51	46	40	49	60	42	53	64	33	38	42	58	36	35	33	36	37	46	44	48
total	390	429	372	365	383	360	368	356	342	362	211	245	276	289	244	220	228	206	221	244	239	240

Month of industrial accidents in rubber products in 1999-2020

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	29	41	21	35	24	23	21	25	28	39	28	16	19	24	13	12	22	25	20	21	23	21
February	41	31	35	32	33	31	45	36	38	29	13	19	18	26	26	20	27	14	16	22	11	23
March	40	45	48	30	32	33	25	29	25	25	16	25	24	24	15	13	14	11	30	24	18	18
April	29	35	27	35	35	27	25	21	39	29	11	23	24	30	18	18	21	18	15	14	22	19
May	24	45	29	25	38	28	28	29	28	24	14	18	21	28	30	14	17	15	16	20	18	16
June	35	36	34	27	36	32	33	27	22	29	11	19	21	24	23	27	21	10	18	26	23	22
July	34	33	37	43	31	35	32	28	31	31	20	22	30	19	21	15	22	15	12	17	23	15
August	30	31	28	30	37	26	25	38	25	35	14	20	27	19	18	14	14	25	25	17	15	22
September	32	36	25	26	44	31	35	34	28	31	30	19	19	18	20	25	22	14	15	19	21	25
October	31	32	31	32	32	38	36	37	29	38	20	21	22	26	23	33	12	18	17	15	24	22
November	37	37	32	25	19	24	33	29	20	28	19	23	26	25	24	17	19	24	20	28	26	16
December	28	27	25	25	22	32	30	23	29	24	15	20	25	26	13	12	17	17	17	21	15	21

total	390	429	372	365	383	360	368	356	342	362	211	245	276	289	244	220	228	206	221	244	239	240
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Prefecture of industrial accidents in rubber products in 1999-2020

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Hokkaido	6	4	7		9		5	3	6	4	4	1	2	6	3	1	2	4	2	6	3	7
Aomori	0	1	3		1		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Iwate	0	1	0		0		3	4	3	1	0	3	2	0	1	0	0	0	1	0	0	0
Miyagi	5	2	6		14		5	2	5	9	8	7	6	2	3	8	9	0	3	5	3	8
Akita	2	3	3		2		2	0	1	4	0	1	1	1	1	0	0	0	0	1	2	1
Yamagata	2	4	2		4		1	3	0	1	2	1	1	0	1	0	2	0	0	1	0	1
Fukushima	9	9	6		2		8	6	6	5	1	3	8	11	6	2	5	2	8	13	7	7
Ibaraki	14	11	13		8		17	10	14	13	10	9	15	3	12	7	5	5	5	5	5	7
Tochigi	16	9	12		7		16	15	12	11	12	7	11	7	7	4	10	9	7	6	13	2
Gunma	7	18	5		9		8	4	5	9	1	5	2	2	5	3	6	5	6	8	8	5
Saitama	27	38	26		35		17	20	31	27	14	19	12	22	17	15	15	9	16	10	19	17
Chiba	12	17	9		10		9	9	15	12	8	11	6	8	6	8	9	4	4	5	13	8
Tokyo	15	18	22		21		22	15	11	11	8	7	12	6	12	6	7	10	11	5	6	3
Kanagawa	18	15	18		10		8	12	6	5	4	3	10	10	8	6	9	9	5	6	8	7
Niigata	3	1	5		2		2	9	6	4	1	2	4	3	5	4	1	1	0	4	5	5
Toyama	3	4	6		3		3	4	10	3	2	3	2	5	2	3	6	1	2	1	1	3
Ishikawa	0	0	2		2		1	0	2	1	0	0	1	0	1	2	0	0	3	2	1	1
Fukui	1	0	0		2		0	0	2	0	0	2	0	1	0	1	1	1	0	2	0	1
Yamanashi	0	2	0		1		3	0	0	1	0	0	1	0	2	1	1	1	3	0	1	0
Nagano	2	4	1		0		1	1	1	4	2	2	2	2	1	5	0	0	2	2	3	1
Gifu	13	14	16		18		12	20	16	12	7	13	12	6	11	14	8	7	9	12	6	11
Shizuoka	21	19	18		16		25	14	17	22	13	15	15	19	11	7	7	9	16	11	8	10
Aichi	34	47	27		37		36	25	24	26	20	11	23	36	25	19	23	24	16	33	15	22
Mie	21	15	14		28		19	22	17	32	11	17	12	11	24	16	16	15	9	11	8	10
Shiga	6	6	7		4		5	4	2	6	0	2	1	4	5	6	1	3	9	2	5	4
Kyoto	3	1	3		4		1	4	2	1	0	0	2	1	2	0	3	1	3	1	3	4
Osaka	36	29	22		29		24	35	21	31	23	31	18	25	13	17	10	13	11	21	13	15
Hyogo	32	31	23		36		26	28	28	22	5	22	26	22	16	17	23	18	15	20	11	20
Nara	13	16	12		11		12	18	8	7	8	8	9	8	7	6	6	7	9	5	10	10
Wakayama	5	1	4		3		1	1	3	3	3	3	3	4	2	2	1	1	1	2	5	2
Tottori	2	4	2		1		1	0	1	0	0	0	1	1	1	1	1	0	1	2	0	0

construction machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
metal manufacturing machine	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
general machine	1	3	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0	0	0	0	1
mobile silviculture machine																	0	0	0	0	0	0
crane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveying machine	2	1	0	2	2	1	2	0	0	2	1	0	0	0	1	0	1	0	0	0	0	0
vehicle	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
pressure vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
tools	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other equipments, facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
temporary buildings, establishments	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0
hazards, harmful substances	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
materials	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
load	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural environment	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
other causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	3	4	3	3	4	2	4	2	1	6	1	2	3	1	2	1	3	0	0	0	2	1

Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miyazaki	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kagoshima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okinawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	3	4	3	3	4	2	4	2	1	6	1	2	3	1	2	1	3	0	0	0	2	1

Data sources: <https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.htm> (MHLW, Japan)

Return to https://www.jisha.or.jp/english/statistics/2020e_industry.html